AMENDMENTS

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method for contactless data transmission, comprising:

receiving a modulated RF signal at a reception unit;

processing one of at least two differently modulated and coded RF signals using a signal processor unit to provide a supply voltage and a data signal produced from the modulated RF signal; and

supplying the data signal to a data processing unit to the supply voltage configured for connection and to the signal processing unit to set at least one of the modulation type and coding type for the RF signals to be processed,

the signal processing unit configured to process at least one of differently modulated and coded RF signals in chronological order, starting from application of a supply voltage until the data processing unit identifies reception of a prescribed data signal.

2. (Previously Presented) The method as claimed in claim 1, wherein the signal processing unit configured to process ASK10% modulated signals and ASK100% modulated signals.

3. (Previously Presented) The method as claimed in claim 2, wherein when a supply voltage is applied to the data processing unit, the signal processing unit is first set to the process ASK100% modulated signals.

4. (Previously Presented) The method as claimed in claim 1, wherein the prescribed data signal is a Request signal transmitted by a readwrite unit at predetermined time intervals.

5. (Previously Presented) The method as claimed in claim 1, wherein the signal processing unit is set to at least one of a modulation and coding type for respective prescribed time periods until the prescribed signal is detected, the time period being longer than the time interval between two Request signals.

6. (Previously Presented) The method as claimed in claim 1, wherein when a supply voltage is applied to the data processing unit, a counter begins to run from a defined start count, and the signal processing unit is set to at least one of another modulation type and coding type if the prescribed signal has not been identified when an end count is reached.

7. (Previously Presented) The method as claimed in claim 1, wherein the signal processing unit is cyclically set to at least one of different modulation types and coding types.

8. (Previously Presented) The method as claimed in claim 1, wherein at least one of the modulation type and coding type are set by controlling demodulation and decoding units and voltage regulators in the signal processing unit.

9. (Currently Amended) ~~The method as claimed in claim 1, wherein software stored in the data processing unit controls the method~~ A computer-readable medium containing instructions for causing a computer to control the processing of an RF signal by a method comprising:

receiving a modulated RF signal at a reception unit;

processing one of at least two differently modulated and coded RF signals using a signal processor unit to provide a supply voltage and a data signal produced from the modulated RF signal; and

supplying the data signal to a data processing unit to the supply voltage configured for connection and to the signal processing unit to set at least one of the modulation type and coding type for the RF signals to be processed,

the signal processing unit configured to process at least one of differently modulated and coded RF signals in chronological order, starting from application of a supply voltage until the data processing unit identifies reception of a prescribed data signal.

10. (Currently Amended) A transponder for a contactless inductive data transmission system, comprising:

a reception unit to receive a modulated RF signal;

a signal processing unit which is connected downstream of the reception unit and has a first output terminal pair to provide a supply voltage and has at least one second output terminal to provide a data signal obtained from the modulated RF signal, the signal processing unit having a device to process at least one of two differently modulated and coded RF signals; and

a data processing unit which is connected to the output terminal pair of the signal processing unit and to which the data signal ~~can be~~ is supplied, and having at least one first output terminal which is connected to the signal processing unit to set at least one of the modulation type and coding type for the signals to be processed.

11. (Previously Presented) The transponder as claimed in claim 10, wherein the data processing unit has a counter, and the signal processing unit is configured to be controlled on the basis of the count.

12. (Previously Presented) The transponder as claimed in claim 10, wherein the signal processing unit is configured to be controlled on the basis of detection of a prescribed data signal in the data processing unit.

13. (Previously Presented) The transponder as claimed in claim 12, wherein the prescribed data signal is a Request signal transmitted by a transmission unit to commence communication with the transponder.

14. (Currently Amended) The transponder as claimed in claim [[1]] 10, wherein the reception unit has an input resonant circuit and a rectifier.

15. (Currently Amended) The transponder as claimed in claim [[1]] 10, wherein the signal processing unit has a first and a second voltage regulator to provide the supply voltage, and a first and a second demodulation and decoding unit to provide the data signal.

16. (Currently Amended) The transponder as claimed in claim [[1]] 10, wherein the first voltage regulator is designed to process modulated energy signals having a first degree of modulation, and

the second voltage regulator is designed to process modulated energy signals having a second degree of modulation.

17. (Previously Presented) The transponder as claimed in claim 15, wherein the first demodulation and decoding unit is designed to process modulated energy signals having a first degree of modulation, and the second demodulation and decoding unit is designed to process modulated energy signals having a second degree of modulation.

18. (Previously Presented) The transponder as claimed in claim 17, wherein the modulation of the energy signals is ASK modulation, and the first degree of modulation is 100% and the second degree of modulation is less than 100%.

19. (Previously Presented) The transponder as claimed in claim 15, wherein the first and second demodulation and decoding units are configured to be controlled via output terminals of the data processing unit.

20. (Currently Amended) The transponder as claimed in claim [[1]] 10, wherein the data processing unit has a microprocessor with a memory in which a program is stored.

21. (Previously Presented) The transponder as claimed in claim 20, wherein the memory is a ROM or EEPROM.